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CHLORIDES OF LIME AND SODIUM.

Observations on the Chlorides of Lime and of Sodium, and Suggestions of some Forms of Application, &c. By HENRY BELINAYE.

It is not without astonishment we contemplate the little favor enjoyed by hygiene. On the continent of Europe it is the subject of particular study, and of general attention, and has given rise to many voluminous works of surpassing interest. Periodical publications are exclusively devoted to it; councils and commissions of men of science are established everywhere purposely for its superintendence, and statesmen are deemed incapable, or neglectful of their duty, who do not devote a due proportion of time to its encouragement. The remarkable increase of longevity in England of late years is principally attributable to those improvements in hygiene which, although unsought for, have followed the advance of the inhabitants in comfort, because in a certain degree inseparable from it. But if any one should deem these improvements sufficient, let him read, were it only the index of the "*Annales de l'Hygiene*," and he will see the number of practical applications of science to the welfare of mankind which the public never hear of in England, although it is the fatherland of philanthropy. However, the scourge now approaching will be an imperative monitor in favor of public hygiene, to whose lore it directs us as emphatically as a statue in a cemetery points to the legend of a tomb. Public hygiene requires not only men of science to invent and suggest, but the great mass of the nation to read and co-operate; and we must hope for the day when it will beneficially supplant that study of "Buchan" and the medicine chest, by which so many people drug themselves into disease, and not a few to death.

I hope these observations may be excused, though they may appear too grandiloquent, if considered only as prefatory to the humble suggestions I have to present; and even the latter may be deemed supererogatory if the cholera be considered as neither contagious nor infectious. However, the great majority of men of science are of a different opinion, and of the justice of this opinion we shall but too soon have personal experience. In many places where this fearful traveller has arrived, he has appeared at first in disguise, and has deceived the inhabitants by his equivocal character. Perhaps the peculiar locality, or the unfavorable season, has prevented his epidemical and contagious nature from appearing distinctly. But, after a certain time of incubation, when warmer and

more relaxing winds have begun to prevail, he has rushed forth in all his epidemical fury, and falling upon some class of men of defective vitality, caused either by depravity or poverty, has revealed all his contagious banefulness.

Of all the chemical agents that have been employed to destroy effluvia, none can compete with the chlorides of sodium, lime, and potash. It is not, therefore, surprising, that on the appearance of cholera in Europe, that truly praiseworthy chemist, Labarraque, should have been applied to on the subject of his antiseptic process. Labarraque advises two glasses of water to be daily given, containing from thirty to forty drops of chloride of sodium; the hands and face to be washed with a solution of it; baths, with six or eight ounces of the liquid chloride in each; plates, containing the antiseptic liquor or powder, to be placed at the doors and on the mantel-pieces; and curtains of coarse linen to be hung before the windows, which are to be kept moistened with the chloride. Desirous of promoting this mode of purification, I wish to recommend some precaution in its use, and next some more convenient forms of application.

The chloride which is evolved in the manner above recommended—a destroyer of colors, odors, and effluvia, in its unmixt state is also a destroyer of life. We know how rapidly an animal dies when immersed in a vessel of chlorine gas. We have also the examples of an English physician who died of a disease of the lungs occasioned by his experiments on this gas, and of several chemists who have suffered from the same cause. Although chlorine has been employed in the treatment of some diseases of the lungs, and although when diffused in a small proportion in the air it has not appeared deleterious, not only it cannot but deteriorate in some degree the natural atmosphere of respiration, but when employed in the abundant manner recommended above, we may fairly suppose that it may become highly deleterious, particularly to persons very young, very old, or very weak. We may suppose this to be the case even when no palpable effects are immediately produced, for may it not oppress the powers of life, just as we see in houses either situated in a low or marshy locality, or near the common sewer, the miasmata slowly destroy the inhabitants, perhaps without producing even one single well characterized attack of fever?

To obviate, as far as possible, these objections, we would recommend the following measures:—Whenever it is desired to cleanse a house, or a room, of effluvia or impurities, a large quantity of one of the chlorides should be placed in the most favorable state for the evolution of the gas. Everybody should then withdraw, taking care to remove all the colored articles of furniture, gilt frames, &c. liable to be injured, and the doors and windows be shut as hermetically as possible. Thus the place will be more speedily purified; and doors and windows being thrown wide open after a due lapse of time, no person's health will be injured. When, on account of the presence of the sick in the same room, or in the same house, a constant evolution of gas is required, flat dishes full of the chlorides should be put only where there are the greatest currents of air, placing the dishes in as high a situation as possible; as it has been found that otherwise the gas, which is heavier than the atmosphere, will not mix sufficiently with the air, and only lie in a more concentrated stratum

on the floor. If, from time to time, there is a suspicion of too large a proportion of chlorine existing in the room, let a little liquor ammonia be thrown on the floor, and the rising of a white vapor will reveal the existence of an excess.

When you walk through an infected place, or approach a person laboring under a highly contagious disease, it has been recommended to keep a handkerchief to the mouth, wetted with the disinfecting liquid. This obstructs the speech, whilst the gas inconveniences the lungs, and the protection is liable to be removed in incautious gesticulation. I have had a simple contrivance made to send abroad ; it has the advantage of leaving the speech free, and of being a protection from deleterious emanations, without depriving the lungs of communication with the usual atmosphere. This mask consists of a wire coming from the back of the head to project before the mouth, where it terminates in a ring, furnished with points, to which a sponge dipped in a solution of chloride of sodium may be attached. A thin and short band of brass crosses the wire, and fixes this simple apparatus to the head immoveably. Being elastic, this mask fits the head of every adult, and may be put on and taken off in a second by each person going into the sick room, and causes no inconvenience in any movement of head or body. Besides its use in contagion, its adoption would save the lives of nightmen, who often sink in their disgusting duty.

Salts containing an excess of acid, when mixed in the dry state with chloride of lime, cause the slow evolution of gas by a new combination that arises. Mr. Garden, whom I have consulted on the subject of this letter, and whose chemical acumen often rests on ingenious minutia from more important pursuits, has had the kindness to construct a smelling bottle containing a powder of the above description. Hung by a ribbon round the neck, the heat of the body will favor the evolution of the gas when the stopper is removed. A more effective protector than camphor and other agents carried on the person, this precaution will not alarm the sick friend or the patient. Should the cholera, or any other contagious disease, become very virulent, the medical attendant might wear cotton gloves, with the end of index and next finger of the right hand cut off. The gloved hands being dipped in the disinfecting solution, the pulse, or any other part of the body of the patient, might be examined without fear, the gravity of the fluid making it constantly flow to the apices of the exposed fingers. Nurses may wear oil-skin gloves, and an oil-skin smock-frock, closing hermetically round the throat, wrists, and over the chest.

Besides the chlorides many other "disinfectants" exist, and not a few of these whose source of power must remain concealed. It would appear that most bodies that emit strong odors possess a virtue against contagion. The cholera has had little influence in places where the forests in the neighborhood have spontaneously ignited, and the wood has remained smouldering over the fire. It will be said, perhaps, that here heat and the pyroligneous acid have played important parts ; but manufactories of snuff have been untouched by the cholera raging around, so that smoking has been enjoined in despotic countries where it was previously forbidden. Nor have examples been fewer during epidemics of the plague, where the centre of the town, the vicinity of the most nau-

seous trades, have remained free from the pestilence raging around. Therefore, the general confidence in the fumes of acetic acid, when not carried too far, is not without some reason for its support. To meet the wish of some friends to possess an antiseptic of this description, I have applied the acetic ether to the beautiful philosophical fumigator first imagined in Germany, and now manufactured in this country by Mr. Garden. It is constructed on the knowledge of the singular and well known fact, that a platinum wire once ignited, remains in this state as long as it is held over spirit or ether. Thus a platinum filagree, appended to a glass rod that dips into a scent bottle full of acetic ether, may be made to diffuse it in the form of a very agreeable and exhilarating vapor throughout the room of an invalid.

ULCERATED NÆVUS.

A Case of Ulcerated Nævus, successfully treated by the New Operation.

By MARSHALL HALL, M.D. F.R.S.E. &c. &c.

MR. HEMING, to whom I am already so deeply indebted, has again afforded me an opportunity of observing the effect of puncture in the cure of nævus. The case was doubly interesting from combining ulceration with the ordinary circumstances of that affection.

The tumor was oval, about one inch and a half in length, and three-fourths of an inch in breadth. The central part was undergoing the ulcerative process; around the ulcer the nævus existed in the form of a ring, about one-sixth of an inch in breadth. The edges of the ulcer were ragged, and slightly phagedenic; the surface of the ulcer was *malis moris*, and had bled from time to time. The nævus rose about an eighth or a tenth of an inch above the surface of the skin.

A common broad needle, with cutting edges, was passed through the substance of the nævus, at its base, and under the ulcer, from side to side, in every direction. Several punctures were made, but one would have been sufficient.

In the course of one week the ulcerative process had undergone the most interesting change into the adhesive. No better or more beautiful illustration could be presented of the *Hunterian* doctrines. The ragged edges became smooth and white; the ulcerated surface covered with a film of coagulated lymph. In a few days more the whole ulcer was completely healed.

As a much slower process, the deposit of coagulable lymph encroached on the edges of the remaining ring of nævus, which in the space of one month had become reduced to one-third its original breadth.

At this period it was thought right, in order to accelerate the process of obliteration, to repeat the operation. But on examination, the process of obliteration of the ring of nævus was going on so beautifully that we determined to leave it for daily observation.

The deposit of coagulable lymph, with obliteration of the vessels, gradually encroached upon the ring of nævus, and destroyed its redness and tumor. Each successive week induced an obvious change. The whole process was so distinct, and so peculiar, that, however a shade of

doubt might be cast upon the former case, none could possibly subsist in regard to the nature of the cure in this.

That every kind of vascular nævus, and even some tumors, morbid growths, and ulcers, may be cured by this simple operation, I have no doubt. A mode of obliterating vascular texture, and of changing vascular action, must have numerous applications in surgery. I have thought it, therefore, incumbent upon me once more to draw the attention of the profession to this subject.

MAGNESIA.

On Varieties of Magnesia. By WILLIAM WEST.

IN the Medical Gazette of August 13th, 1831, is a case of poisoning by sulphuric acid, by Martin Sinclair, M.D. Fellow of the Royal College of Surgeons of Edinburgh.

I request your insertion of a few remarks suggested by the following passage in the account, (vide Med. Gazette, August 13th, 1831, page 625, first column.) The passage is as follows:—"By medical writers the carbonate of magnesia is recommended in preference to the carbonate of lime, and is certainly superior by producing a saline aperient by combining with the sulphuric acid. In the present case, however, the carbonate of lime was preferred as having a greater affinity for sulphuric acid, and because being more easily missible with liquids, it could be administered in greater quantities in a short space of time." This latter clause would indicate that the writer was acquainted only with the ordinary carbonate of magnesia of commerce, prepared from the residuary liquor of sea-water, after the extraction of common salt. This is light, mixes imperfectly with water, and occupies a large bulk even when mixed; it has a taste which, though not very readily discoverable on placing a small quantity on the tongue, is to many disagreeable in a copious draught. This taste appears to depend in some degree on the presence of chlorides and sulphates of magnesia, lime, and soda, left behind in the process of washing the carbonate of magnesia. But since the nauseous flavor of sea-water is chiefly owing to dissolved animal and vegetable matters, and is scarcely perceived in water taken up at a great distance from any shore, I know from experiment so much of the readiness with which soluble, animal, and vegetable substances unite with and adhere to all the common earths, (I waive the question of a real combination,) that I should expect this flavoring matter, too minute and subtle, perhaps, to be at present detected by our chemical tests, to adhere to, and be precipitated with the carbonate of magnesia, rather than to remain dissolved, and be washed away. Certain it is that I do not find on analysis of light carbonate of magnesia so large a portion of muriates or sulphates as fully to account for its disagreeable flavor. But there is another carbonate of magnesia to be met with in trade which I have been in the habit of recommending and supplying, and which is approved, I believe, by all who have tried it: this is known as pure, or heavy carbonate of magnesia.

An ounce measure, lightly filled, weighs about 160 grains; of the com-

mon sort, the same bulk weighs 48 grains. This heavy carbonate is free from taste ; it is not prepared, in any stage, from sea-water, but from solution of sulphate of magnesia, free from lime, from muriates, and from vegetable bitter. There is another somewhat curious reason of trade for its closer approach to purity. Carbonate of magnesia, when first precipitated, is very white, and of course much mixed with the solution of the alkaline precipitant. Repeated washing, while it carries off the alkaline salt, breaks down that crystalline structure on which the lightness depends, and leaves it heavy. A few, and but a few generations back, carbonate of magnesia was many times its present price, so as to be worth adulterating with carbonate of lime ; and, moreover, that ready and infallible test for chalk in such a mixture, its not dissolving entirely in moderately diluted sulphuric acid, was unknown, or in few hands.

Medical practitioners had then no easy way of judging of its freedom from adulteration with chalk but from its extreme lightness, and to procure it light rather than tasteless was the great desideratum of the laboratory.

Neither the spread of chemical knowledge, nor the example of Dr. Henry's superior preparation, has entirely abolished this prejudice, and hence the manufacturers of common carbonate of magnesia have a strong motive to wash slightly, in order to preserve that lightness which is now a real defect without a countervailing advantage. The manufacturers of pure, heavy carbonate of magnesia, who do not aim at lightness, have not this motive to spare washing, and their preparation is as much distinguished by mixing readily with liquids, and by freedom from taste, as it is by chemical purity. I think no one accustomed to its use could write, "carbonate of lime was preferred because more easily missible with liquids : " it is actually less so.

Two things I wish to guard against ; first, the being supposed to possess any nostrum in magnesia, or to claim the exclusive source of supply for the heavy carbonate, or the calcined magnesia from it, although, in my own connexion amongst apothecaries, I am in the habit of furnishing them largely with this magnesia.

Next, the appearance of imputing any blame to the medical practitioner who treated the case. He seems to have acted with zeal and promptitude, and the same termination might have taken place under any other management ; but I beg leave to point out a circumstance forming a reason for preferring magnesia, or its carbonate, to chalk, which he has not noticed, whether aware of it or not, and which in *other cases* is quite likely to make all the difference between *life* and *death*. It is, that from the comparative insolubility of sulphate of lime, when chalk is added to dilute sulphuric acid, however large the quantity of either, the action of the sulphuric acid on the carbonate, and its saturation with lime, soon stop, from the first portions of sulphate forming a crust round the carbonate, protecting it from the further action of the acid. Even agitation, without actual crushing, is insufficient to bring the whole of the carbonate of lime within the sphere of action of the sulphuric acid. There may exist together, therefore, in the stomach a great mass of carbonate of lime, enveloped and protected by sulphate of lime, and at the same time a large quantity of sulphuric acid, either kept wholly separate from, or

very slowly acting on, the chalk, but exerting the full force of its deadly energies, chemical and physiological, on the structure or functions of the stomach, without check or control. With magnesia this cannot possibly be the case. I should recommend as the best preparation in every such case, if at hand, Henry's calcined magnesia, or the pure calcined magnesia obtained by calcining the carbonate above described, on account of avoiding distressing efforts at eructation in the corroded state of the œsophagus and surrounding parts. Next to these, pure heavy carbonate of magnesia, or even supercarbonate of soda, and chalk only as a temporary substitute, in cases occurring in the country, where chalk might be in the house, and a mixture could be prepared and administered whilst a messenger was on the way to the nearest place where some variety of magnesia could be obtained.

FUNGUS HÆMATODES OF THE BRAIN.

Case of Fungus Hæmatodes of the Brain, with long-continued Constipation of the Bowels. By JAMES LAIDLAW, Esq. Surgeon.

SAMUEL KIDMAN, fifty-eight years of age, by occupation a servant. His wife states that it was about two years ago he first complained of a severe fixed pain in the head, immediately over the left temple, which was attended with dimness of sight : these symptoms were relieved, for the time, by the abstraction of blood, by leeches, and by the application of blisters to the part. The attacks, however, became more frequent and of longer duration ; the severity of the pain being greater, but still confined to the same spot. Some months after his first attack, he was observed one evening, while at tea, to hang down his head, with a stupid, vacant appearance of countenance, and, upon being spoken to, he was found to be nearly insensible : he was totally unconscious of the presence of his friends, and was with some difficulty (by shaking him and pulling him about) made aware of it. After that time, he frequently fell into the same comatose state, sometimes as often as eight or nine times in the course of a day ; and the attacks of headach, giddiness, &c. returned almost daily. Still he had no paralysis, and, with the exception of a slight loss of appetite, was in tolerable general health, and attended to his domestic duties.

Thus he continued up to the beginning of last April, when one evening, while at tea, he was seized with a fit, which continued about twenty minutes, after which he became calm and tranquil as usual. He was not seen by his medical attendant during the continuance of the fit, but it appears, from the description of his friends, to have been of an epileptic rather than an apoplectic character. Leeches, and a blister, were afterwards applied to the head.

After a lapse of nine days, he had another fit of the same nature, which lasted about the same time, and from which he recovered as from the former. A fortnight after the occurrence of the second fit, he was seized with paralysis of the right side of the body, and with total loss of vision and the power of articulating : this occurred while he was shaving himself. The remedies which had been usually employed were again re-

sorted to, but without any benefit ; and he continued in this unhappy condition, suffering little, and often remaining for a day or two in a state of apparent insensibility, until the 11th of July, when he suddenly recovered the power of speech, and from his conversation it was evident his mental powers were unimpaired ; but he was very weak, and was evidently sinking. On the 19th of July, he died. For several weeks previous to his death, he had taken very little nourishment, and for *nearly nine weeks* had had no evacuation from the bowels.

Sectio Cadaveris. Upon opening the head, the membranes on the surface of the brain were found in a perfectly healthy state, with the exception of a slight thickening and opacity of the arachnoid. The right hemisphere of the brain was quite sound and healthy ; but, upon cutting into the left, the middle lobe of it was found converted into a mass of fungoid disease : it was considerably larger than natural, and, by pressing upon the petrous portion of the temporal bone, that bone had become partially absorbed, so as to expose the cavities of the ear. The arachnoid membrane, at the inferior part of the tumor, was so much thickened as to form a sort of sac holding the tumor together. No vestige of the left lateral ventricle could be discovered ; nor was there any appearance indicating which had been the cineritious and which the medullary part of the brain. Upon removing the diseased mass, it seemed to melt away from the touch, and had a good deal the appearance of the tumor formed by a hernia cerebri. The arteries and nerves at the base of the brain were healthy. In the cavity of the abdomen, the large intestines were found choked up by the accumulations of hardened fæces. The liver was larger, and of a darker color than natural ; the gallbladder was very much distended, and, upon cutting into it, was found to contain thirty-three gallstones, of the size of peas, and about three ounces of bile. The other viscera were healthy.

One of the most remarkable circumstances in this case was the extreme torpidity of the bowels, so that, for nearly nine weeks previous to his death, no evacuation could be procured. This must have arisen from their impaired nervous sensibility, in consequence of the disease of the brain, as there was no morbid appearance of the bowels themselves. There are two cases published by Dr. Baillie, in which no evacuation could be procured from the bowels, in the one for a period of fifteen weeks, and in the other twenty days ; but the obstruction in both these cases was mechanically produced by stricture in the rectum.

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EFFECTS OF BREATHING IMPURE AIR.

It is a highly interesting question, and one which has scarcely received the attention it merits, what is the effect on the health of breathing for a long period an atmosphere vitiated by human respiration. The

effect of actual confinement within a limited portion of air, in inducing rapidly fatal consequences, is sufficiently familiar. The symptoms, under these circumstances, plainly refer themselves to the organs which are principally concerned in conducting the process of respiration. The embarrassment and distress are immediately referred to the lungs; it is their functions which are impeded, and it is the gradual interruption of these, which induces the fatal effect. But the case is very different when the privation of fresh air is partial only, and arises from what is usually regarded as imperfect ventilation. In rooms which are ill supplied with fresh air, as for instance in working rooms, where numbers are collected, no immediate difficulty is ordinarily experienced which can be referred to the lungs. On first entering the room, perhaps some slight dyspnoea is felt; but this soon disappears, and the individual directly becomes so accustomed to the new medium, as scarcely to be aware that he is not breathing the purest atmosphere. The contrast is indeed very striking, when from such a medium he makes a transition to the purer air without; and the grateful sensation he then experiences, reminds him of the contaminated region from which he has emerged. In passing from a crowded assembly, as a public meeting, into the open air, and the reverse, the effect of this contrast cannot be mistaken. Even in exchanging the air of the country for that of the town the change is at once obvious and striking, and although in this case human respiration is not the only source of contamination, the influence from this cause is perfectly manifest. Yet in all these cases the difference between actually breathing the pure and the impure air, is by no means so obvious or apparent; and so far as the action of the lungs is concerned, the process seems to go on as well in the one as in the other. It becomes then a question of some interest, what are the effects, if any, of a contaminated atmosphere when breathed for a long period; and whether the same force of habit which reconciles us to the sensation, also fortifies the system against its influence, and renders it altogether innoxious.

This question can in some measure be resolved *a priori*, by considering the changes which the blood undergoes in its sensible properties from the contact of air, and likewise the purposes which it is destined to answer in the animal economy. As an obvious effect of atmospheric oxygen is to change the dark color of venous blood to a florid hue, it were natural to anticipate that where this principle is partially and imperfectly supplied, the color of the blood, wherever exposed to view, would be less bright than where it is abundantly furnished. Secondly, as it is the property of arterial blood to stimulate the heart and arteries, it might be supposed that one effect of impure air would be to produce a feeble action of the arterial system. Thirdly, as it is the office of the blood to supply nutrition to the system, it might well be expected that, if the necessary changes in its chemical constitution are not duly effected, the secretions

must deteriorate in character, digestion be ill performed, the peristaltic action become sluggish, the growth of the various parts be checked, and a general debility of the system be induced. Now we do, in fact, find differences nearly corresponding to these between individuals differently situated in regard to supplies of fresh air. In comparing, for instance, the inhabitants of the town to those of the country, it is a common remark that the complexions of the former are less ruddy, thus indicating a want of florid blood in the capillaries; their digestion less powerful, manifesting that the system is not fully and rapidly nourished; and the pulse more feeble, showing a want of due vigor in the action of the heart. The effect of imperfect ventilation becomes far more striking when we remark the aspect of those, who, in the pursuit of their daily occupations, are enclosed in crowded and ill ventilated apartments. We notice at once their pale and dingy complexions, and the want of a due action on the surface; we find the muscular substance to be soft and flabby; the pulse feeble; the appetite impaired, the powers of digestion limited. Yet under all these circumstances, no actual disease appears to be induced, and individuals sometimes attain advanced age, having passed two-thirds of life in so foul and corrupt an atmosphere that to one entering it from abroad it seems absolutely intolerable. Even the diseases which occur in this class of persons are seldom of that violent and acute character which is seen in those whose circulation is active and vigorous; and those who might be judged from their aspect to be the victims of a slow marasmus, will yet profess to have enjoyed through life uninterrupted health. They have, in fact, no particular disease, and experience no sensation of suffering; but the body is not well nourished, the motions are slow, and the whole appearance torpid and sluggish.

These observations will perhaps seem vague; but their vagueness arises less from any want of reality in the objects described, than from the difficulty of describing by means of negative qualities. That there is a reality in the gradual influence of confined air, we are fully satisfied; and our observations on this subject are confirmed by those of others who have directed their attention to this subject. In a short but highly interesting memoir on the subject of miners, contained in a late number of the *Edinburgh Journal*, is described a state of constitution not differing except in degree from that just alluded to. The author commences by remarking the infrequency of acute disease of the lungs among this class of persons. He observes that miners are rather less liable to inflammatory complaints than other classes in the community, and that they have no particular tendency to morbid affections of the chest. It appears also that they experience no particular annoyance even when at work in mines where the deficiency of fresh air is very considerable; and that they attain in many instances to a considerable age. On the other hand, we are told that they complain of lassitude, debility, and drowsiness, and that they all become paler in complexion. The author's theory is, that while an excess of oxygen in the

atmosphere is calculated to prove a stimulus and to excite inflammatory action, the deficiency of this principle will have the opposite effect; and while it depresses all the powers of the system, will prevent the occurrence of inflammatory disease. That with such a theory to maintain, he should have been disposed to swell the list of immunities enjoyed by those exposed to this antiphlogistic influence is natural enough; and it appears from other accounts that miners are not so much exempted from acute or chronic pneumonia as those who work in a purer atmosphere. The subject, however, of the gradual influence of impure air is in every view highly interesting; and we hope that others enjoying extensive opportunities of observation will be led to pursue it.

FACTS RESPECTING CHOLERA.

A VERY interesting discussion on the contagiousness of the Cholera recently took place in the Westminster Medical Society, among the members of which are many of the most eminent medical men in England. It lasted four evenings, and a minute account of it, on each evening, is given in the Medical Journals of London. At the last meeting, among the members who took part in the debate were Drs. James Johnson, George Gregory, and A. T. Thompson; Dr. Macleod, the former, and Dr. North the present editor of the Medical and Physical Journal. It appeared, at the termination of the discussion, that every member but one, was of opinion that the disease is contagious, in a greater or less degree.

Dr. Gregory, whose remarks are quite fully reported, treated the subject with clearness and ability. He dwelt upon and illustrated very amply, three facts as particularly illustrating the mode in which the disease is propagated; these were,

“First, its mode of travelling from country to country, and from town to town, invariably appearing first on the frontier next to an infected district, or if on an island, always first showing itself in a sea-port—in short, never being met with except where communication had been held with places in which it already prevailed. *Secondly*, the manner in which it frequently spread through the members of a family, or communicated itself to those who visited the sick, though residing in a different and distant locality. *Thirdly*, the immunity which had, in numerous well-authenticated instances, attended a rigid isolation, as at Peterhoff and Zarcozelo, where there were from 8 to 10,000 persons who remained unaffected, while it raged around them.”

Dr. G. alluded to the circumstance, as worthy of note, that in all the Indian reports there is stated to have been one spot in every large town, which the disease either did not visit at all, or not until almost every other place had been decimated by it—that spot was the jail; and its immunity is attributed to the slight intercourse of its inmates with other inhabitants.—Another circumstance that produced a strong impression on his mind was, the particular course of the disease in Russia:—“the manner in which it

travelled up the Wolga to the north, and then, crossing over to the Don near its source, pursuing a course diametrically opposite, namely, down that river to the south; thus travelling in two nearly parallel lines in contrary directions—a phenomenon perfectly intelligible if the plain straight-forward doctrine of its being carried by man were admitted, but wholly incomprehensible on any other."

Allusion was made to the fact that most of the English Physicians who had been zealous advocates for the non-contagiousness of the disease, have, on nearer examination of its progress, been convinced of its contagious character. Dr. Russell, *e. g.* went to Russia a non-contagionist, but has been satisfied that he was in error; Dr. Lowrie, who had seen the disease in India without suspecting it contagious, is convinced that it is so at present. Mr. Orton, author of a work on cholera, and a staunch non-contagionist, now comes forward and says that the arguments against contagion are "as dust in the balance"—such are his words—when placed against those that are now opposed to them. Dr. Johnson, of the Medico-Chirurgical, is now quite satisfied that the disease is contagious *under certain circumstances*, i. e. when a predisposition to it exists in the person exposed,—and what more can be said of the smallpox itself? Indeed, says Dr. G. "one would think it scarcely possible that two opinions *could* exist with regard to a question where the *Medical Gazette* and the *Lancet* embraced the same side, and were seen fighting under the same banner."

Referring to the exceedingly futile attempt so often made to prove the non-contagiousness of this disease, from the number of instances in which persons have been exposed to it, and yet escaped, Dr. Gregory remarks that "Calculations of the number who escaped might lead us to form some estimate of the proportion of mankind who are susceptible of the disease; but negative evidence can never, by any increase, disprove the positive results opposed to it. Yet this was the constant argument of the non-contagionists. Like the man tried at the Old Bailey for sheep-stealing — 'Ah! my Lord,' said he, 'if I had known that you would have condemned me because two men swore they saw me steal the sheep, I would have brought twenty to swear they did not see me.' " — The fallacy of this argument, however, is more strongly illustrated by the case supposed in our last, of the person who should argue the innocuousness of musquetry, because so many escaped harm who were at the memorable battle of Waterloo.

Touching the contagiousness of this disease, it cannot but have been remarked that however zealously opposed by Physicians whilst but poorly informed of the details of its progress, it has been almost uniformly allowed, by the same persons, after having had more ample opportunities of noticing it. In addition to the persons before mentioned, we find its contagiousness expressly affirmed by the most distinguished of those who have been eye witnesses of its ravages; among these we would mention Drs. Scott and Stuart, the principal members of the Medical Board at

Bombay—the Physicians of two divisions of the army at Bengal—the Medical Board of Calcutta—Dr. Kennedy, author of a valuable treatise on the cholera—the Bombay Report—the Medical Board of Russia—the Central Sanitary Commission in France, and the Superior Council—the Persian and Turkish governments—the four Austrian physicians who were sent to Russia to observe the disease—Dr. Walker as well as Drs. Barry and Russell—Drs. Makartienne, Martinengo, Meunier, Angelin, and Salinas, who have witnessed the cholera in different countries—Sir William Crichton and Dr. Loder, physicians to Nicholas—the late Russian General Diebitsch, and the Polish commander Skrznecki. Besides these, we may mention the Emperor Nicholas; the British Ambassador at the court of St. Petersburg; and the French consuls Lesseps, Guys, Reynaud and Gamba.

The important subject of the appropriate *treatment* of the cholera is pursued in England, as we expected it would be, with unparalleled zeal and enterprise. The great question seems to be, whether there is yet any untried expedient which might possibly be useful in mitigating the violence of the disease;—the most judicious and practical men in the profession are assiduously occupied in endeavors to find out some more specific remedy than any that has been hitherto tried. The medical Journals teem with communications on the subject, and contain almost nothing on any other than this all-absorbing topic. Among the propositions already made, we would mention the following.

1. *Bark*.—It is supposed by many who have seen the cholera that it resembles, in many particulars, the tertian ague. Indeed Dr. Barry, at a public meeting held at Newcastle, stated that “there was more analogy between it (malignant cholera) and the worst forms of the tertian ague, or intermittent fever, than between it and the ordinary cholera of this country (England).” Hence it is proposed to use bark in doses of ʒiij. every second hour, combined perhaps with opium or landanum. The bark in substance or tincture is recommended, in preference to the salts of quinine, as, besides a certain quantity of quinine and cinchonine, bark contains other principles of an astringent nature, which would aid in arresting the evacuations attendant on this disease.

2. *Galvanism*.—As the poison of cholera appears to act as a powerful sedative on the nervous system, and produce a recession of blood from the surface, numerous writers propose galvanism combined with a hot air bath, and local stimulants, as a probable mode of arresting its symptoms.

3. *Injection* into the blood of oxygenating salts. The nitrate and chlorate of potassa, in doses of from 10 to 30 grs. injected into the blood, have been supposed capable of oxygenating the blood, and so removing the most formidable symptom of cholera. This proposition has been made by Dr. O’Shaughnessy, of London, who had gone to Sunderland, at the last dates,

for the purpose of prosecuting his researches, and testing his theory by experiment. The result will be communicated to the reader in due time.

4. *Inhalation* of oxygenated gases.

5. *Transfusion*.—This remedy has been proposed in England; but it appears that it has been tried and found unavailing, at Berlin. The account of these experiments is so interesting that we shall give it entire next week.

6. *Cautery*.—At a late meeting of the Westminster Society, Dr. Barry remarked that the phlogosed state of the spinal marrow, noticed in examining the bodies of those who had died of cholera, led Dr. Lange, of Cronstadt, to try the use of the actual cautery to the spine, opposite the part where the inflamed or softened appearances presented themselves. This was done in fourteen cases, twelve of which recovered; and this too at the commencement of the epidemic, the very time at which experience had shown it was violent and intractable. In several of these cases the patients were so much satisfied of the relief afforded, that they begged for the repetition of the operation; but such were the prejudices of the people against the medical men—such their persuasion that the disease was produced by poison, and that this method was a kind of torture by burning, that it was found necessary to discontinue it.

Dr. Wilkinson has stated, in the last number of the London Journal, that he understands it to have been uniformly the case, that, in those countries where the cholera has prevailed, it has been preceded by an influenza, similar to that which recently prevailed in England. This fact will disappoint the expectations of those who had hoped that our recent epidemic might be a *substitute* for the great plague of the age. Dr. W. also remarks that he has been informed by highly respectable practitioners, that those who have previously suffered a severe attack of influenza are more apt to be affected by the cholera.

A Sunderland Physician has announced to the British Government that he has discovered a specific for cholera, and will make it known on receiving a suitable compensation! The reply of the government was such as must suggest itself to every reader. It is not possible that any one could see his fellow creatures dying around him, and thus withhold the means of preserving them till he could receive an adequate compensation from government. The proposition, therefore, must be a base attempt on the part of this Physician to impose upon the rulers and defraud the treasury of his country.

A Medical Exchange is held daily in Berlin for the purpose of mutual communications among the Physicians, respecting the cases of cholera, the effects of different or new modes of treatment, &c. &c.

The mortality of cholera on the continent of Europe has been very different in different places. According to an account given in the Russian State Gazette, the number cut off by the disease out of every 1000 inhabitants, during the first 48 days of its visit, has been—at Lemberg, 51; Mittau, 34; Riga, 31; Posen, 16½; Petersburg, 12½; Konigsburgh, 11½; Elbing, 9½; Dantzic, 8½; Steitin, 5½; Berlin, 4.

At a stated meeting of the Counsellors of the Massachusetts Medical Society, held Feb. 1st, 1832, the following Preamble and Resolutions were adopted :—

Whereas, the disease called *Epidemic Spasmodic Cholera*, has prevailed in various parts of Europe, and may hereafter appear on this side of the Atlantic Ocean ; so that it is expedient that the Physicians of this country should be prepared to meet this disease : Therefore,

Resolved, 1st. That a Committee of *seven* be chosen by the Counsellors of this Society, whose duty it shall be to investigate the history of this disease, and especially to ascertain the best mode of treating, and carefully and without prejudice consider whether it be or be not a contagious disease.

2d. That the sum of thirty dollars be appropriated to defray any such expenses for the purchase of books, as may be thought necessary by the Committee.

3d. That this Committee be authorized to make public the result of their deliberations at the expense of the Society, at any period they may think most conducive to the public good.

The following gentlemen were chosen on this Committee, viz. Drs. James Jackson, John C. Warren, and George Hayward, of Boston, Alfred Perry, of Stockbridge, John Green, of Worcester, Rufus Wyman, of Charlestown, and Abel L. Peirson, of Salem.

Legalization of Anatomical Dissection.—The atrocious crimes recently committed in England, and which have produced there an excitement scarcely less than that occasioned by the cholera or the reform bill, have drawn the attention of the Government to the necessity of providing by law for the supply of proper subjects for dissection ; and a bill has been introduced into Parliament for this purpose by Mr. Warburton. It will hardly, however, accomplish the object for which it is or ought to be designed ; for it provides that no body shall be given for dissection without the consent of the person when alive, or of his nearest relative after death. Strange infatuation !

Spontaneous Combustion.—On the 23d of March, 1830, when at the island of Rótuma, Southern Pacific Ocean, I had requested a native to bring me some of the sweet scented male flowers of the Pauhuf (*Pandanus odoratissimus*) ; they were accordingly brought on board, enveloped in native cloth, and packed in baskets formed of the cocoa-nut frond ; and having been brought off to the ship during a heavy sea, were wetted by the spray. I laid them aside unopened in my cabin. Some hours after, looking at them I observed a steam arising from the basket ; and, on taking them out, found that a spontaneous combustion had taken place among those situated underneath, most of which had become completely blackened, and the heat which proceeded from them was very great. Had they been incautiously stowed in a ship's hold, the consequences might have been very serious.—*Mr. G. Bennett's MS. Journal*, 1830.

Luminosity of Coral Insects.—On the 20th of March, 1830, when coming off to the ship at Thor Bay, island of Rótuma, Southern Pacific Ocean, some hours after dark, a long reef of coral extended some distance from the beach, some part of which was dry at low water, and at other places the water was very shallow. The canoe in which I was going off grazed with some degree of violence on the coral nearly at the termination of the reef, when the surface of the water immediately became brilliantly phosphores-

cent, and remained so for a brief period. The water at other places I did not observe, this night, displaying any phosphorescent light. Can we infer from this that the coral zoophytes have luminous properties?—*Ibid.*

Effects of Cold Weather.—According to the Natches papers, more deaths had occurred in that place, in one week, in consequence of the long continuance of cold weather, than in any one week since the yellow fever raged there in 1825.

The offer of 25,000 roubles, by the Russian government, for a cure of cholera, has already produced 125 essays, pointing out infallible remedies. Unluckily almost all of these have been discovered in the closet of the writers, and never tried in the sick chamber.—*Gazette Médicale.*

In consequence of a case of poisoning, at Paris, having, in the first instance, been declared to be cholera, the Prefect has addressed a circular letter to the Mayors of the provinces, directing them to be on their guard against similar mistake or imposition.—*Ibid.*

New Professorship.—At a late meeting of the Corporation of Harvard University, John Ware, M.D. of this city, was chosen Adjunct Professor of the Theory and Practice of Physic to that institution. In the wisdom of this choice but one voice will exist among the Faculty. Dr. W. will bring to the place a philosophical mind richly endowed, and a happy faculty of communicating to others the result of his investigations.

The prospect of a speedy reduction if not an entire abolition of postage on *periodicals*, will relieve distant readers of a part of the expense attending the subscription to this Journal.

Whole number of deaths in Boston for the week ending February 3, 24. Males, 8—Females, 14—Stillborn, 2.

Of dropsy on the brain, 2—scarlet fever, 3—dropsy, 1—consumption, 4—apoplexy, 2—abscess, 1—quinsy, 1—convulsions, 1—lethargy, 1—lung fever, 1—old age, 1—croup, 1—throat distemper, 1—influenza, 1—unknown, 3.

Whole number of deaths in Boston for the week ending February 10, 28. Males, 17—Females, 11.

Of palsy, 1—lung fever, 4—consumption, 4—bowel complaint, 1—throat distemper, 4—canker, 1—hooping cough, 2—scarlet fever, 2—liver complaint, 1—influenza, 1—drowned, 1—dropsy, 1—debility, 1—sudden, 1—dysentery, 2—unknown, 1.

MECKEL'S ANATOMY, 1st VOL.

CARTER & HENDEE have this day received, Manual of General, Descriptive, and Pathological Anatomy. By J. F. Meckel, Professor of Anatomy at Halle, &c. &c. Translated from the German into French, with Additions and Notes, by A. J. L. Jourdain, Member of the Royal Academy of Medicine at Paris, &c. &c., and G. Breschet, Adjunct Professor of Anatomy at the School of Medicine, &c. &c. Translated from the French, with Notes, by A. Sidney Doane, A.M., M.D. Feb. 15.

GREY'S SUPPLEMENT.

ANY one having Grey's Supplement to the Pharmacopœias, London edition of 1828, belonging to the subscribers, will confer a favor by returning it. JARVIS & PEIRSON. Feb. 15.

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